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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,021	12/11/2003	Kun-Tzu Lin	TSM03-0406	7493
43859	7590	03/16/2005	EXAMINER	
SLATER & MATSIL, L.L.P. 17950 PRESTON ROAD, SUITE 1000 DALLAS, TX 75252			LOPEZ, FRANK D	
			ART UNIT	PAPER NUMBER
			3745	

DATE MAILED: 03/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/733,021	Applicant(s) LIN ET AL. 	
	Examiner F. Daniel Lopez	Art Unit 3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-14 and 16 is/are rejected.
- 7) ☒ Claim(s) 11 and 15 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/25/04</u> . | 6) <input type="checkbox"/> Other: ____ |

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Double Patenting

Applicant is advised that should claim 13 be found allowable, claim 16 will be objected to under 37 CFR 1.75 as being an identical duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 112

Claims 5-10 and 16 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 5 line 2 "as the piston moves, the fixed-volume chambers move herewith" is confusing, since this limitation is claimed in claim 2 line 2-3 (suggest that this limitation be deleted).

In claim 16 line 3 "cylinder" should be --piston--, to agree with the specification.

Claims not specifically mentioned are indefinite, since they depend from one of the above claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 12, 13 and 16 are rejected under 35 U.S.C. § 102(b) as being anticipated by either Baughman (see discussion below) or Louviot (having elements similar to Baughman).

The means for restricting (e.g. claim 1 line 7-10) is considered to not invoke the 112 sixth paragraph, since it includes the limitation "carried by and movable with the piston" is considered to recite structure in support of the means.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 1-6, 12-14 and 16 are rejected under 35 U.S.C. § 103 as being unpatentable over Steinkamp et al in view of Baughman. Steinkamp et al discloses a linear fluid motor comprising a piston (65) movable in a stationary cylinder (60), between end positions, by selectively introducing or evacuating via first (62) or second (64) ports, through a wall of the cylinder, to or from first and second variable volumes, respectively, on first and second sides, respectively, of the piston; wherein seals (67, 73) define a first fixed volume chamber (74), movable with the piston, between the piston and the wall of the cylinder and connected to the first variable volume by a first restrictive orifice (75); wherein the first port and first orifice are so related that, when the piston is only at or less than a selected distance from the first end, the fluid enters or leaves the first variable volume by the first orifice; but does not disclose that the seals define a second fixed volume chamber, movable with the piston, between the piston and the wall of the cylinder and connected to the second variable volume by a second restrictive orifice; wherein the second port and second orifice are so related that, when

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the piston is at or less than a selected distance from the second end, the fluid enters or leaves the second variable volume by the second orifice.

Baughman teaches, for a linear fluid motor comprising a piston (20) movable in a stationary cylinder (12), between end positions, by selectively introducing or evacuating via first (24) or second ports, through a wall of the cylinder, to or from first and second variable volumes, respectively, on first and second sides, respectively, of the piston; wherein seals (40, 30) define a first fixed volume chamber (46), movable with the piston, between the piston and the wall of the cylinder and connected to the first variable volume by a first restrictive orifice (48); wherein the first port and first orifice are so related that, when the piston is only at or less than a selected distance from the first end, the fluid enters or leaves the first variable volume by the first orifice; that the seals (52, 30) define a second fixed volume chamber (58), movable with the piston, between the piston and the wall of the cylinder and connected to the second variable volume by a second restrictive orifice (60); wherein the second port and second orifice are so related that, when the piston is at or less than a selected distance from the second end, the fluid enters or leaves the second variable volume by the second orifice, for the purpose of cushioning the piston when it approaches either end of the cylinder.

Since Steinkamp et al and Baughman are both from the same field of endeavor, the teachings disclosed by Baughman would have been recognized in the pertinent art of Steinkamp et al. It would have been obvious at the time the invention was made to one having ordinary skill in the art to make the seals of Steinkamp et al define a second fixed volume chamber, movable with the piston, between the piston and the wall of the cylinder and connected to the second variable volume by a second restrictive orifice; wherein the second port and second orifice are so related that, when the piston is at or less than a selected distance from the second end, the fluid enters or leaves the second variable volume by the second orifice, as taught by Baughman, for the purpose of cushioning the piston when it approaches either end of the cylinder.

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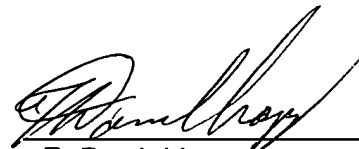
Conclusion

Claims 11 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 7-10 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. § 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is 571-272-4821. The examiner can normally be reached on Monday-Thursday from 6:15 AM -3:45 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on 571-272-4820. The fax number for this group is (703) 872-9306. Any inquiry of a general nature should be directed to the Help Desk, whose telephone number is 1-800-PTO-9199.



F. Daniel Lopez
Primary Examiner
Art Unit 3745
March 14, 2005